

Enterprise Asset Management Survey 2004

Summary Report





Introduction

The management of plant, equipment, facilities and other assets to maintain peak performance is vital to productivity and profit. Downtime and unplanned stoppages can present serious issues for business continuity, service levels, operational costs and revenue generation.

Today, firms are under increased pressure to deliver more for less, with reduced resources and budgets. Intenia believes that factors such as preventive maintenance, criticality analysis and diagnostic management are some of the few operational areas left that offer true improvement potential, and that ultimately impact a company's profitability.

In 2003, Intenia set out to create the first global enterprise asset management survey. Now in its second year, the survey continues to provide maintenance professionals with the key guide to help benchmark and judge their performance on key maintenance and asset management issues.

Carried out in September 2004, the survey included responses from over 400 global manufacturing and operations-related organizations, encompassing multiple asset-intensive industry sectors. Industries covered included food and beverage, pharmaceutical and chemical, general manufacturing, facilities and infrastructure, and power and utilities.

The report considers whether organizations actually regard maintenance as worthwhile and, if so, how they view its effectiveness and what effort is being put into achieving the best possible results.

In essence, the results of the survey produced some clear messages, most predominantly that there appears to be a troubling disparity between the views businesses hold about the value of preventive maintenance and the actual commitment of sufficient resources or budgets for these needs. As a result, Intenia believes that many businesses are failing to take advantage of what could be one of the few remaining truly untapped business benefit areas that can directly impact bottom line performance.

The survey looks at how such trends and considerations vary from industry to industry, the key inhibitors that influence these apparent disparities, and the typical outcomes.

We hope that you find the survey results to be both insightful and a powerful source of information in helping you plan your future plant maintenance activities.

Brian Dunks

Industry Solution Director EAM, Intenia

Key Findings

- Over 85 percent of respondents agreed that preventive maintenance increases operational output and almost two thirds report their belief in the competitive advantage it offers.
- Nearly 60 percent view maintenance as an investment.
- The majority of organizations actually commit less than 10 percent of total cost of operations to maintenance.
- Over two thirds of respondents indicated that less than half of their maintenance budgets were allocated to preventive work.
- A 'fix it when broken' approach still appears to be predominant within most industries and is becoming more prevalent in comparison with 2003 survey results.
- More than half of survey respondents indicated that individual annual production losses due to plant equipment failure could be anything up to USD 50,000.
- Almost 7 percent reported average annual lost production costs in excess of USD 1 million.
- Over 15 percent of all organizations surveyed reported some shutdowns that lasted for over 90 hours.
- Poor comprehension of maintenance problems by other line managers is seen to be a key issue and appears to be a growing problem with a 10 percent increase on the previous year's survey.

INDUSTRY SPOTLIGHT:

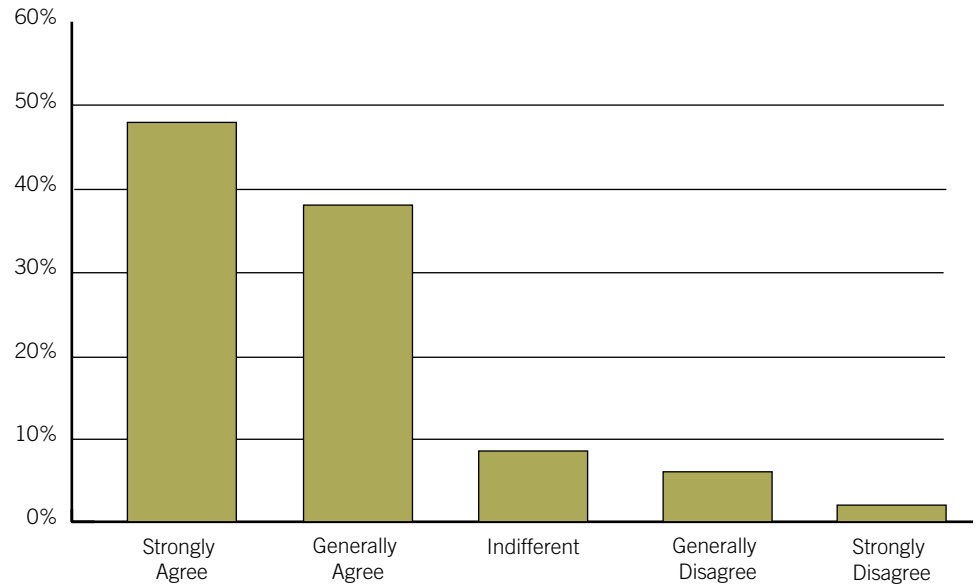
Power Generation and Utilities

Power generation and utilities organizations have strong views regarding maintenance as an investment, and claim the lowest level of zero downtime.

Is Maintenance Worth the Effort?

Intentia's aim was to find out how organizations viewed and addressed their maintenance needs, how much they are spending on maintenance and how much of this was allocated to preventive work.

Q. Does your preventive maintenance increase plant production/operations capacity?



Preventive maintenance can take many forms and over the years has gained many names. Ultimately, it's a process that provides the business with the right asset availability at the right time.

For preventive maintenance to be worth the effort, it has to provide clear and undeniable benefits.

A resounding 85 percent of all survey respondents agree that preventive maintenance increases their plant production or operations capacity.

Brian Dunks, the EAM industry solution director at Intentia says, "The result of this survey question offers a clear indication that preventive work is seen to have true value for an organization. Increasing the availability of equipment can clearly have an impact down the entire supply chain. Reliable equipment enables the operation group to complete customer orders on time and at the predetermined unit cost. This in turn, delivers what the customer wants, when they want it, and at the right price."

Such capabilities provide a clear competitive advantage over suppliers with less reliable plants.

Almost two thirds of the organizations surveyed reported that their preventive maintenance program gave them a competitive advantage. In general, this was a consistent view across all industries.

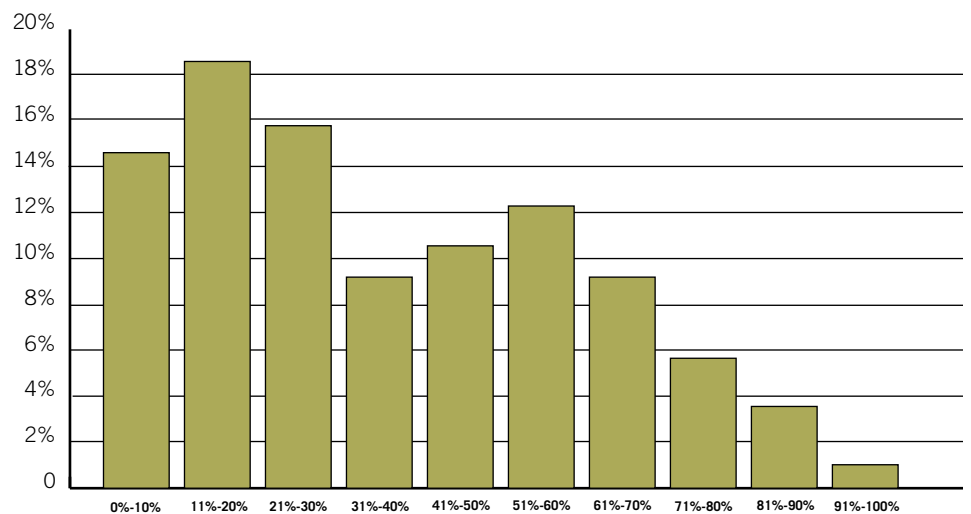


Is Industry Spending Enough on Preventive Maintenance?

From such encouraging results, it is clear that preventive maintenance is deemed to be worth the effort. What remains to be seen is this: If maintenance is worth doing, are companies putting enough effort into securing the potential results and benefits?

Overall the results showed that the majority of survey respondents are spending less than 10 percent of the total cost of operations on maintenance, with smaller organizations making up a higher proportion of this figure. Interestingly, despite the views to the contrary about the value of preventive maintenance, it seems even less budget is being allocated to this particular maintenance work.

Q. Of your total maintenance budget per annum, what percentage is allocated to preventive as opposed to corrective maintenance?



Over two thirds of organizations allocate less than half of their maintenance budget to prevention, suggesting that perhaps many businesses still continue to adopt a 'fire fighting' approach to maintenance.

Dunks explains, "For many businesses, a planned maintenance strategy is critical to reducing the risk of equipment failure and downtime, meeting industry safety requirements, and ensuring business continuity and plant availability in order to maximize productivity and profitability.

"A 'corrective' strategy is not necessarily the wrong thing. Some businesses are actually more suited to a 'run to fail' approach, where repairing an asset online may not be feasible, or reliance on redundant systems is more cost effective than preventive maintenance.

"However, for those operating in conditions where lean organizations are dominant, or where safety and continuity is paramount (such as pharmaceutical/chemical businesses and facilities/infrastructure type organizations), businesses need to understand the potential savings a preventive maintenance strategy can provide."

Intenia believes that organizations are still spending insufficient amounts of money on preventive maintenance, which it sees as one of the few untapped areas of real improvement potential for many businesses.

INDUSTRY SPOTLIGHT:

Food and Beverage

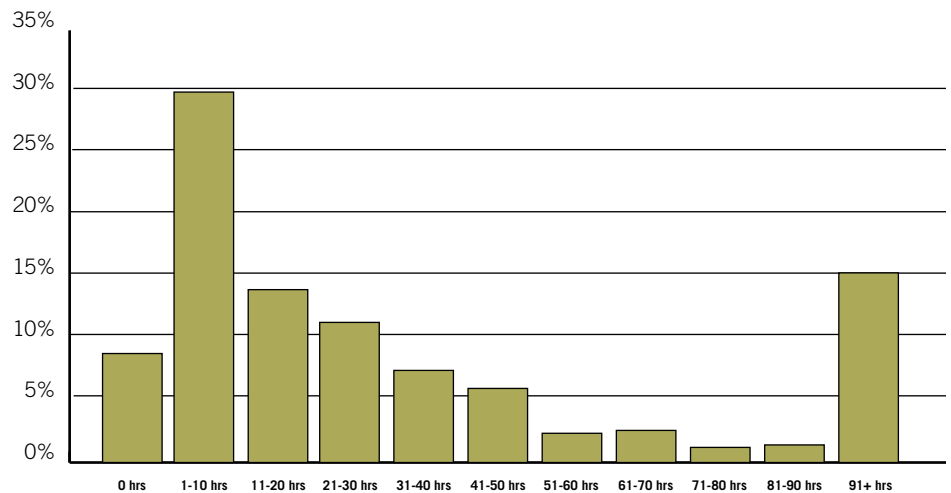
This industry demonstrated a clear belief in the investment qualities of maintenance and its ability to increase competitive advantage, but paradoxically also reported higher-than-average unscheduled downtime.

The Impact of Inadequate Maintenance

The survey went on to investigate the extent to which plant and equipment failures occur and impact the profitability of organizations in the current economic climate.

Nearly 60 percent of all organizations reported that they experienced up to 5 percent downtime per month across their production/manufacturing resources. Additionally, just under 30 percent of all organizations reported that the longest period of downtime they experienced last year was one to ten hours in duration. Unfortunately, over 15 percent of all organizations surveyed reported some shutdowns that lasted for over 90 hours.

Q. Last year, how many hours did your longest period of downtime last, which was caused by a single breakdown?



Intenia believes that many major stoppages could have been avoided with better preventive maintenance or could have had less of an impact with better preparation.

“Downtime and protracted stoppages raise some serious risks and concerns for profitability and survival in a highly competitive market, since many of these issues and potential inefficiencies must eventually be passed on to customers and stakeholders,” Dunks says.

Over 50 percent of firms surveyed were able to claim that they did not have a single breakdown that stopped production in more than half of their plant during the last year; and over three quarters reported two or fewer major plant shutdowns in the last year. Some industries were more prone to report more and longer shutdowns than others.

When also questioned about the average annual cost for lost production as a result of plant or equipment failure, only half of the organizations surveyed were able to limit their average annual cost of lost production to under USD 50,000. Even more troubling, nearly 7 percent reported that their average annual losses were more than USD 1 million.

“In reality, the losses faced by many organizations are most probably much more costly than they initially believe, when considering other factors that may be overlooked such as scrap, lost customers, additional labor and utility overheads,” Dunks says.

These figures underscore the lost income potential that may have been avoided through higher equipment and facility availability.

INDUSTRY SPOTLIGHT:

Facilities and Infrastructure

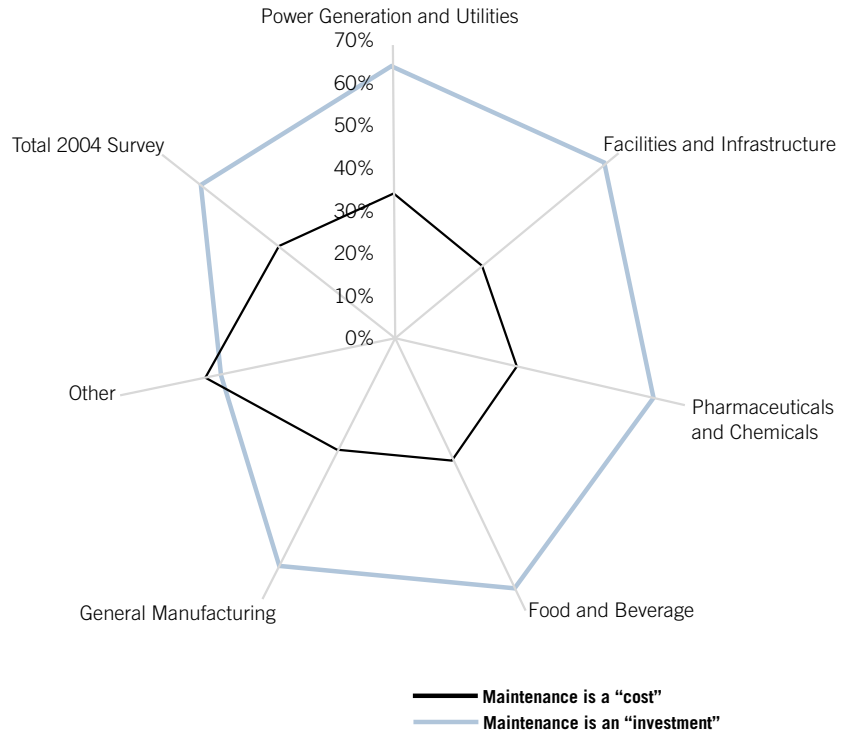
Facilities and infrastructure organizations are the leaders in outsourcing maintenance and many are also likely to believe strongly in the value of maintenance in increasing operational capacity. However, the maintenance professionals within these organizations also reported issues in poor comprehension of their problems from other line managers.

Cost or Investment?

It seems there is some disparity, depending on the industry type, between the views many maintenance professionals hold about the value of maintenance, and the actual spending allocated to such work.

The survey results showed that the majority of organizations view maintenance as an investment. Nearly 60 percent took this view, an increasing figure over the 2003 survey.

Q. Do you describe money spent on maintenance as a cost or an investment?



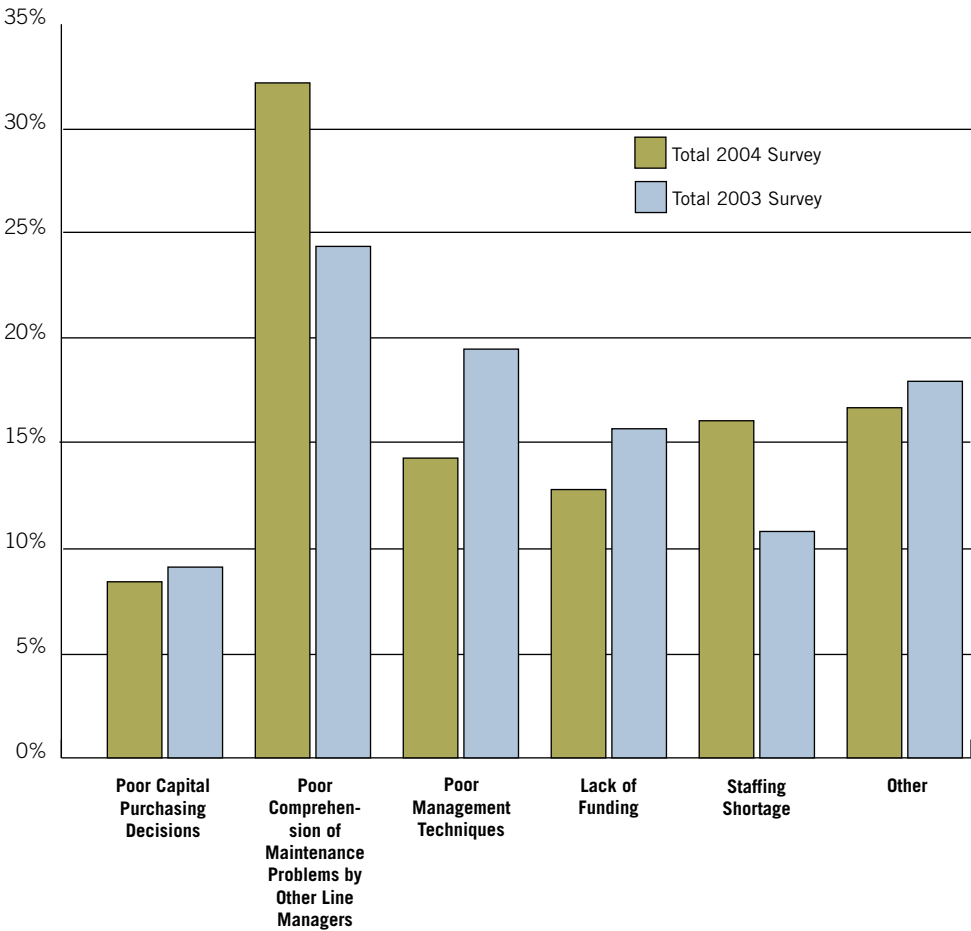
Dunks comments, "Over the last 12 months we have seen an increasing percentage of respondents reporting their belief in maintenance as an investment. The number of respondents who strongly agree with this view has increased by nearly 7 percent over 2003, indicating a growing awareness in the value of, and potential return on investment from, enterprise asset management.

"Intenia believes that organizations that see maintenance as an investment are much more likely to be successful in combating the causes of downtime. We hope that this indicates a growing trend for organizations to consider maintenance operations in a more positive light.

"However, what remains apparent is that there are still many inhibitors in translating this view into a reality, in particular with preventive maintenance where there are many businesses who are suited to and could benefit from such a strategy, but are perhaps not doing so."

Inhibitors to Change

Q. What do you believe is the greatest problem faced by maintenance managers?



INDUSTRY SPOTLIGHT:

Pharmaceutical and Chemical

Maintenance spending in this sector is relatively low compared to other industries and of this spending, few companies spent more than half on preventive maintenance. The majority opt for corrective strategies, and suffer from substantial downtime issues.

Poor comprehension of maintenance problems by other line managers came out above other issues cited as inhibitors to change in maintenance programs, with 32 percent of respondents indicating this to be a key issue. The survey showed a growing problem in this area with an almost 10 percent increase over last year's results.

Larger organizations in particular reported this as more of a concern than smaller ones.

Dunks says, "This may be the result of more formal management systems in larger organizations, which are perhaps more removed from day-to-day issues than those found in smaller companies."

Other issues raised (including poor management techniques, lack of funding, staffing shortages and poor capital purchasing decisions) were reflected evenly depending on the industry sector.

Continuing on the same theme, the survey also delved deeper into whether a 'fix it when broken' approach is still predominant among those managers not directly responsible for manufacturing.

The survey showed a disconcerting trend upwards based on comparison with the 2003 results, illustrating the difference between what maintenance departments view as an investment and the issues they face in gaining broader support from decision makers.

Conclusion

From the survey results, it is evident that although there are positive upward trends in attitudes towards maintenance strategies and the impact they can have on the bottom line of a business, there is still a way to go before many firms realize in real terms the potential gains to be made from such a proactive approach to maintenance.

Different industries are impacted to varying levels by those issues and considerations that have been explored in this survey, with each sector characterized by its own industry-specific pressures and needs.

But a common thread among all industries is that close cooperation between maintenance and operations during planning processes can help reap significant rewards for most businesses—and that maintenance professionals need to become more effective internal marketers to help achieve this.

If carried out correctly, integrated processes provide a win-win opportunity across the entire business. Operations produce what they expect and when they expect it, without unplanned stoppages due to equipment failures, thus influencing profitability. Maintenance gets the equipment when they need it and can ensure they provide the highest level of availability.

For a copy of the full report please contact your nearest Intenia office.

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